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The Federal Communications Commission
Washington, D. C. 20554

Subject: Comments concerning RM-10867

Dear Commissioners:

I respectfully submit the following comments concerning RM-10867, the proposal by the ARRL regarding restructuring of the Amateur Radio Service. As an American, an ARRL Life Member, and a concerned amateur radio operator, I urge the Commission to reject the proposal based on the reasons outlined below. In summary, it appears that the ARRL proposal 1) contradicts the fundamental stated purposes of the Amateur Radio Service, 2) does not serve to increase the level of voluntary services that can be offered by amateurs to the Homeland Security effort, 3) has a high potential for increasing the budget needs of the Commission, 4) removes significant incentives for advancing the skills of amateur operators, and 5) will most likely not result in meaningful growth of the Amateur Radio Service. I also would ask the Commission to consider my additional comments on both written and Morse code testing.

Conspicuous in its absence in RM-10867 is the lack of any real data presented to support the ARRL proposal. Also interesting is the conjecture that they somehow represent the Amateur Radio Service. The latest figures available show that the ARRL membership comprises about 154,000 amateur operators, while the FCC's database shows that the number of licensed amateurs is about 683,000, in round numbers. (It should be noted that the ARRL does not publish membership statistics, but the QST distribution statistics filed in late 2003 indicate the true number of US members may be closer to 131,000.) That indicates that the ARRL's membership accounts for only about 23% of American amateurs. Furthermore, ARRL administrators proposed, drafted and filed with the Commission this restructuring proposal without consultation with its membership, except solely for the Morse code speed requirement. As long as less than 1 in 4 amateur operators in the US are members of the ARRL, any claim to representation must sadly be classified as wishful thinking and without basis.

Fundamental Purpose for Amateur Radio. While the ARRL proposal upon first reading sounds like an attempt to broaden the Amateur Radio Service, thoughtful consideration of their proposal shows it to be fundamentally flawed in various ways. In addition, while the ARRL Board of Directors has presented many conjectures in their proposal, they have failed to show how their proposal would encourage the growth of the Amateur Radio Service and contribute to the purposes for the establishment of the Service, as enumerated in 47 CFR Part 97.1. These purposes are as follows:

> §97.1 Basis and purpose.
> The rules and regulations in this Part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:
> (a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
> (b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.

> (c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communications and technical phases of the art.
> (d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
> (e) Continuation and extension of the amateur's unique ability to enhance international goodwill.

From the Basis and Purpose stated by the FCC, it is apparent that the Amateur Radio Service is meant to be a service used for voluntary technical advancement of both individuals and the radio and electronics arts and sciences as a whole, while the rules established in Part 97 are meant to encourage such advances and achievements. It is notable that items b), c) and d) all refer to distinctly technical matters, thereby making the Amateur Radio Service an inherently technical, but voluntary pursuit. In addition, the public service aspect recognized in item a) can only result from the technical abilities of amateurs who are ready to use their skills in times of emergency or other matters of public service. Finally, item e) results from the traditional technical nature of amateur radio communications, in which amateurs have consistently collaborated, both in emergency situations and on shared technical interests, which has resulted in the enhancement of international goodwill. Examples of such international efforts are the Amateur Satellite Service, international competitions in direction finding, international expeditions for communications purposes, international efforts to push the limits of long distance communications at both very low and very high frequencies, as well as the sharing of technical information across national boundaries and cultures. As a result, it is impossible to separate the technical nature of amateur radio from the rules governing the service. It seems apparent that the FCC has recognized this intimate connection in the current rules.

The ARRL proposal suggests that it has the purposes of "[enhancing] the license structure in the Amateur Radio Service, and to foster the integration of new technologies". Although these are lofty goals, the ARRL has not shown that their proposal would indeed accomplish these goals, nor have they adequately examined the side effects of their proposal.

Since the ARRL proposal seeks to abolish Morse testing for the General class license, automatically upgrade some 323,000 Technician class licensees, nearly ½ of all licensed operators, to General class without testing, and add an entry level license class not requiring testing in the fundamentals of Radio Frequency safety, it is difficult to see how this constitutes any encouragement in technical skills or advancement of radio and communications technology. Acceptance of the ARRL proposal would seem to violate the basic purpose of the Amateur Radio Service as specified in the Commission's own rules.

Upgrading these 323,000 Technician class operators to codeless General also ignores 141,000 current General Class licensees who have earned code credit, including a substantial number who tested at 13 words per minute and a written test before a FCC examiner prior to establishment of VEC testing. This wrong by ARRL's so-called incentive licensing in the late 1960s remains unresolved yet today. Now may well be the Commission's last opportunity to correct this by upgrading FCC tested Generals to the next higher class license.

Homeland Security. The ARRL has widely publicized its partnership with the Department of Homeland Security and the availability of trained amateurs to serve in case of local and national emergencies. It seems contradictory that the ARRL now proposes that the FCC create a license structure that does not certify minimum skills from those very amateurs that would be needed in times of a communications emergency. As noted in Part 97.1 d), "trained operators, technicians and electronics experts" will be required, but amateur operators must possess fundamental, minimum skills before such training and advancement to expert status can be accomplished. The ARRL proposal, with reduced testing and automatic upgrades, appears to

ignore the very skill levels that will be required of amateur operators in the future. Such reduction in demonstrated skill levels is sure to reduce the ability of amateurs to respond in times of emergencies, and therefore, the ARRL proposal is neither in the best interest of the American public, nor consistent with the stated purpose for the Amateur Radio Service.

Increase in FCC Budget and Resources. It should be noted that the ARRL fails to point out the effect of their proposal on band occupancy. Especially on the 80 and 40 meter bands, it is often difficult to find a frequency that is not in use, either due to the large number of amateur users or due to shortwave broadcast stations in the 40 meter band. Noting that there are currently about 141,000 General class licensees and about 323,000 Technician licensees, the ARRL proposal would immediately give an additional 323,000 amateurs access to the General bands. This amounts to an increase of 330% in the number of amateurs sharing the General class bands. Such an increase is certain to cause an increase in problems and complaints to the FCC. Should the Commission decide to implement the ARRL proposal, it will be important to ensure that adequate budget and resources are allocated for a much expanded role in enforcement and complaint handling.

Furthermore the HF allocations for the ARRL's proposed entry level licensees are at the band edges. In the past the Commission has wisely placed Novice and Technician Plus allocations away from the band edges, thereby ensuring that the less experienced operators have a small chance of causing unintentional interference outside of the amateur HF bands. I encourage the Commission to move any entry level frequency allocations away from the band edges in order to reduce the chances of inadvertent out-of-band operations, thereby reducing the potential for additional enforcement resources.

The ARRL in paragraph 23 of their proposal states that amateurs "require so little of the Commission's resources and contribute so much," however, their proposal, contrary to their conjecture, seeks to increase the resource requirements of the Commission and reduce the long term level of amateur contribution through a decline in standards. The ARRL further states that amateurs "self-regulate; … self-train; … largely self-administer; … assist the public in times of emergency; and … contribute heartily to the development of new and updated telecommunications systems." However, without proper examination requirements and certified knowledge of both regulatory and technical matters, it seems guaranteed that the Amateur Radio Service will ultimately require more of the Commission's resources and contribute less to the benefit of the American public. If the Amateur Radio Service is to continue in the tradition of self-regulation, self-training, self-administering, public assistance and technical advancement, the Commission should reject the lowering of standards. To do otherwise would increase the regulatory costs.

Advancement of Technical Skills. In their proposal, the ARRL correctly asserts that "Morse Telegraphy Is But One Aspect" of license restructuring considerations. However, the more important consideration has nothing whatsoever to do with Morse code, but relates directly to the fundamental purpose for the establishment of the Amateur Radio Service, as specified by the FCC in 47 CFR Part 97.1: the improvement and encouragement in technical skills amongst amateur operators. The ARRL points out in paragraph 8 of their proposal that in Docket 98-143 "The Commission stated that it continued to believe that there should be a structure of license classes sufficient to encourage Amateur Radio operators to advance their skills in meaningful ways". I agree that this is a reasonable goal and such an objective would be in the best interest of the Amateur Radio Service. A continuing advancement in skills would certainly be in the best interest of the people of the United States.

Unfortunately the ARRL proposal does not appear to provide a license structure with incentive for advancement of skills. One could easily question the ARRL motives, but their petition should be viewed in the light of Part 97.1 and the prior FCC statement.

As part of the ARRL proposal, the entry level license for the Amateur Radio service would consist of 25 multiple choice questions, yet would give access to 250 kHz of the 80 meter band, 175 kHz of the 40 meter band, 250 kHz of the 15 meter band, and 450 kHz of the10 meter bands. It is notable that the entire bandwidth of these bands is 500 kHz, 350 kHz, 450 kHz and 1700 kHz respectively. Thus the entry level licensee would be given access to 50% or more of the 80, 40 and 15 meter bands along with 26% of the 10 meter band. Such a large allocation does not seem to provide any real incentive for upgrading.

The ARRL proposal also requests that all current Technician class licensees, including those with Morse credit, be automatically upgraded to General class. This automatic upgrading goes against the grain of an incentive based system and does not seem to encourage any increase in skills or advancement of abilities. The ARRL states that the current examinations for Technician and General class licenses are very similar and do not warrant any additional testing. However, if the tests are so similar, those who are interested in upgrading should have no trouble taking the Element 3 exam for General class and showing that they are indeed advancing in their abilities.

The ARRL states in paragraph 10 of their proposal that "the entry level Technician Class license examination is (of necessity) overly comprehensive in its subject matter, and is therefore a deterrent to newcomers …" On the other hands, statistics from Volunteer Examiners show that 85% of the applicants do indeed pass the Technician exam. Meanwhile the Commission's own database shows that the number of entry level amateurs has increased dramatically since the introduction of the Technician license without a Morse code requirement and that the number of total amateur operators has remained essentially stable for quite some time. In fact, paragraph 25 of the same ARRL proposal states "the Commission expressed satisfaction with the Technician Class license as the only entry level license class. Indeed, it has proven over time, relative to the Novice class license, a popular entry-level license." These observations and data appear to contradict the ARRL's statement of paragraph 10. Considering the number of entry level licenses issued, the 85% passing rate, and the ARRL's own admission, it appears that the current entry level examination is neither too comprehensive nor a deterrent to newcomers.

Growth of the Amateur Radio Service. Although not expressly stated in RM-10867, the ARRL has attempted to justify the reduction in requirements and issuance of automatic upgrades as a means to increase participation in the Amateur Radio Service. One could argue whether increased participation by less qualified individuals is desirable based on the purpose for the Service, the benefit to the American public, and other concerns. However, a more fundamental question regards whether the proposal will indeed attract a significant number of amateur operators for the long term. It is interesting to note that the number of licensed amateur operators in the US has remained essentially constant for quite some time, in spite of requirements and examinations that the ARRL claims are deterrents.

In the meantime, Japan has already experimented with simplified licensing requirements in their amateur service and the results are available to be considered in any decision made by the Commission. Official Japanese statistics show that following the reduction in licensing requirements, a rapid growth in the amateur ranks occurred, peaked in 1995, and has fallen rapidly ever since. Since 1995 the number of Japanese amateurs has dropped by almost 50% and data shows that they are continuing to lose amateurs at a rate of about 6,000 per month!

In view of the results of the Japanese licensing experiment and consideration of basic human nature, it seems ludicrous to suggest that lowering the requirements would cause any long term increase in amateur participation. The Japanese experience seems to show that those who enter a technical service, such as amateur radio, without any effort, usually drop out. On the other hand, those who are interested will not be deterred by reasonable entry requirements. One could

certainly ask if those individuals who will not remain committed to the purposes of the Amateur Radio Service would indeed serve the best interests of the American public.

Morse Code Testing. As amateur operators and the FCC are well aware, the subject of Morse code testing has been an emotional issue for quite some time. The ARRL did not go as far as other petitioners in their request for removal of the Morse testing requirement. Most of the petitioners that request complete removal of the Morse examination appear to have overlooked several important issues. These include the fact that less than 10% of the ITU participating countries have actually dropped the requirement for Morse testing. To the best of my knowledge, only 16 countries out of 189 ITU member nations have dropped the Morse testing requirement for amateur radio. These are Hong Kong, Denmark, Croatia, Papua New Guinea, Australia, Finland, Luxembourg, Singapore, Ireland, New Zealand, Norway, Germany, Switzerland, Austria, Belgium, and United Kingdom. In addition, statements have been made by several administrations, including parts of the former Soviet Union, indicating that they will not drop the Morse requirement.

Should the Commission decide to drop Morse testing, it would appear that reciprocal licensing issues with such administrations would be clouded at best. The specific wording in both agreements between the US and the CEPT countries and the IARP countries clearly calls for the proof of Morse ability in order to gain full reciprocal operating privileges. In this regard, I urge the FCC to carefully consider the implications of their decision and to retain some semblance of Morse testing for both the General and Extra class licenses proposed by the ARRL.

There is no doubt that CW operation is the most fundamental mode of communication, that it serves better than voice and digital modes under extremely noisy band conditions, can be operated with the simplest of equipment, serves as an international language through its use of standard abbreviations, etc. These arguments have been presented countless times and are still true. Additionally, data provided in other proposals shows that CW operation using Morse code is the second most popular communication mode in amateur use. It would indeed seem difficult to understand how an Amateur can claim to advance skills and become an expert, as stated in Part 97.1, if they do not have at least a fundamental understanding of the simplest communications technique.

Written Testing. The current state of written examinations is also of great concern to many amateurs. Since the text of the examination questions, along with both the correct and incorrect answers are published and known ahead of time, the written examinations for all amateur license classes have degenerated into an exercise in rote association with no real understanding involved. Evidence of this is continually being exhibited through on-the-air behavior and questions being asked in various forums.

It is understandable that a newcomer to the Amateur Radio Service would need to ask for advice in building antennas and operating practices. However, when holders of the Amateur Extra license have to ask how to build a dipole antenna or what band to set their tuner to when transmitting, one must question how they became holders of such a license. If they obtained their license honestly and not fraudulently, then it can only be assumed that they memorized the material. They thus neither have any idea what they were studying, nor why. This situation does not sound encouraging for the amateur operators that are being encouraged to help in times of emergencies or in the advancement of radio technology and electronics. I would personally hope that those who would respond to assist in an emergency could at least construct a simple antenna and know how to tune their radio equipment, before volunteering to serve as emergency communicators.

I urge the Commission to take this into consideration and remove from publication the answers to the test questions, both correct and incorrect. This would serve to force prospective examinees to study the material and not simply use word association to decide which options are correct or incorrect. This would also have the effect of making the existing test elements stronger without serious revision. As a result of not publishing all of the answers, examinees would have to study

all of the material, since they would not know which particular questions would be on their specific examination.

Conclusion. In conclusion, I urge the Commission to reject the proposal submitted by the ARRL as RM-10867 and give serious consideration to "(c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communications and technical phases of the art." Likewise, similar proposals requesting the complete dropping of Morse code testing and relaxing of technical requirements for the Amateur Radio Service should be summarily dismissed. By enhancing, rather than diluting, the Amateur Radio Service, a far greater service would be performed for the American public.

Respectfully,

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